

[SEQUENCE LISTING]

<110> SUNTORY LIMITED

SUNTORY BIOMEDICAL RESEARCH LIMITED

<120> THERAPEUTIC METHODS AND AGENTS FOR DISEASES ASSOCIATED WITH  
DECREASED EXPRESSION OF AOP-1 GENE OR AOP-1

<130> YCT-687

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<211> 1542

<212> mRNA

<213> Homo sapiens

<400> 1

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<211> 1433

<212> mRNA

<213> Rattus norvegicus

<400> 2

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<212> mRNA

<213> mouse

<400> 3

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<210> 4

<211> 256

<212> PRT

<213> Homo sapiens

<400> 4

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			20						25					30	
Ala	Ala	Cys	Gly	Arg	Thr	Ser	Leu	Thr	Asn	Leu	Leu	Cys	Ser	Gly	Ser
			35						40					45	
Ser	Gln	Ala	Lys	Leu	Phe	Ser	Thr	Ser	Ser	Ser	Cys	His	Ala	Pro	Ala
			50						55					60	
Val	Thr	Gln	His	Ala	Pro	Tyr	Phe	Lys	Gly	Thr	Ala	Val	Val	Asn	Gly
			65						70					75	
Glu	Phe	Lys	Asp	Leu	Ser	Leu	Asp	Asp	Phe	Lys	Gly	Lys	Tyr	Leu	Val

	85	90	95
Leu Phe Phe Tyr Pro Leu Asp Phe Thr Phe Val Cys Pro Thr Glu Ile			
	100	105	110
Val Ala Phe Ser Asp Lys Ala Asn Glu Phe His Asp Val Asn Cys Glu			
	115	120	125
Val Val Ala Val Ser Val Asp Ser His Phe Ser His Leu Ala Trp Ile			
	130	135	140
Asn Thr Pro Arg Lys Asn Gly Gly Leu Gly His Met Asn Ile Ala Leu			
	145	150	155
Leu Ser Asp Leu Thr Lys Gln Ile Ser Arg Asp Tyr Gly Val Leu Leu			
	165	170	175
Glu Gly Ser Gly Leu Ala Leu Arg Gly Leu Phe Ile Ile Asp Pro Asn			
	180	185	190
Gly Val Ile Lys His Leu Ser Val Asn Asp Leu Pro Val Gly Arg Ser			
	195	200	205
Val Glu Glu Thr Leu Arg Leu Val Lys Ala Phe Gln Tyr Val Glu Thr			
	210	215	220
His Gly Glu Val Cys Pro Ala Asn Trp Thr Pro Asp Ser Pro Thr Ile			
	225	230	235
Lys Pro Ser Pro Ala Ala Ser Lys Glu Tyr Phe Gln Lys Val Asn Gln			
	245	250	255

<210> 5

<211> 257

<212> PRT

<213> Rattus norvegicus

<400> 5

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5

10

15

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20	25	30	
Val Ala Ser Arg Arg Thr Cys Leu Thr Asp Met Leu Trp Ser Ala Cys			
35	40	45	
Pro Gln Ala Lys Phe Ala Phe Ser Thr Ser Ser Ser Phe His Thr Pro			
50	55	60	
Ala Val Thr Gln His Ala Pro His Phe Lys Gly Thr Ala Val Val Asn			
65	70	75	80
Gly Glu Phe Lys Glu Leu Ser Leu Asp Asp Phe Lys Gly Lys Tyr Leu			
85	90	95	
Val Leu Phe Phe Tyr Pro Leu Asp Phe Thr Phe Val Cys Pro Thr Glu			
100	105	110	
Ile Val Ala Phe Ser Asp Lys Ala Asn Glu Phe His Asp Val Asn Cys			
115	120	125	
Glu Val Val Ala Val Ser Val Asp Ser His Phe Ser His Leu Ala Trp			
130	135	140	
Ile Asn Thr Pro Arg Lys Asn Gly Gly Leu Gly His Met Asn Ile Thr			
145	150	155	160
Leu Leu Ser Asp Leu Thr Lys Gln Ile Ser Arg Asp Tyr Gly Val Leu			
165	170	175	
Leu Glu Ser Ala Gly Ile Ala Leu Arg Gly Leu Phe Ile Ile Asp Pro			
180	185	190	
Asn Gly Val Ile Lys His Leu Ser Val Asn Asp Leu Pro Val Gly Arg			
195	200	205	
Ser Val Glu Glu Pro Leu Arg Leu Val Lys Ala Phe Gln Phe Val Glu			
210	215	220	
Thr His Gly Glu Val Cys Pro Pro Asn Trp Thr Pro Glu Ser Pro Thr			
225	230	235	240
Ile Lys Pro Ser Pro Thr Ala Ser Lys Glu Tyr Phe Glu Lys Val His			

245

250

255

Gln

&lt;210&gt; 6

&lt;211&gt; 257

&lt;212&gt; PRT

&lt;213&gt; mouse

&lt;400&gt; 6

Met Ala Ala Ala Ala Gly Arg Leu Leu Trp Ser Ser Val Ala Arg His

5

10

15

Ala Ser Ala Ile Ser Arg Ser Ile Ser Ala Ser Thr Val Leu Arg Pro

20

25

30

Val Ala Ser Arg Arg Thr Cys Leu Thr Asp Ile Leu Trp Ser Ala Ser

35

40

45

Ala Gln Gly Lys Ser Ala Phe Ser Thr Ser Ser Ser Phe His Thr Pro

50

55

60

Ala Val Thr Gln His Ala Pro Tyr Phe Lys Gly Thr Ala Val Val Asn

65

70

75

80

Gly Glu Phe Lys Glu Leu Ser Leu Asp Asp Phe Lys Gly Lys Tyr Leu

85

90

95

Val Leu Phe Phe Tyr Pro Leu Asp Phe Thr Phe Val Cys Pro Thr Glu

100

105

110

Ile Val Ala Phe Ser Asp Lys Ala Asn Glu Phe His Asp Val Asn Cys

115

120

125

Glu Val Val Ala Val Ser Val Asp Ser His Phe Ser His Leu Ala Trp

130

135

140

Ile Asn Thr Pro Arg Lys Asn Gly Gly Leu Gly His Met Asn Ile Thr

145

150

155

160

Leu Leu Ser Asp Ile Thr Lys Gln Ile Ser Arg Asp Tyr Gly Val Leu

	165	170	175
Leu Glu Ser Ala Gly Ile Ala Leu Arg Gly Leu Phe Ile Ile Asp Pro			
	180	185	190
Asn Gly Val Val Lys His Leu Ser Val Asn Asp Leu Pro Val Gly Arg			
	195	200	205
Ser Val Glu Glu Thr Leu Arg Leu Val Lys Ala Phe Gln Phe Val Glu			
	210	215	220
Thr His Gly Glu Val Cys Pro Ala Asn Trp Thr Pro Glu Ser Pro Thr			
225	230	235	240
Ile Lys Pro Ser Pro Thr Ala Ser Lys Glu Tyr Phe Glu Lys Val His			
	245	250	255
Gln			

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<211> 21

<212> DNA

<213> Artificial Sequence

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<210> 8

<211> 18

<212> DNA

<213> Artificial Sequence

<400> 8

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<210> 9

<211> 28



<212> DNA

<213> Artificial Sequence

<400> 9

tcttgcctgg atcaacacac caagaaag

<210> 10

<211> 22

<212> DNA

<213> Artificial Sequence

<400> 10

ccctctgctt gctgatgtga ct

<210> 11

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<212> DNA

<213> Artificial Sequence

<400> 11

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<211> 29

<212> DNA

<213> Artificial Sequence

<400> 12

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<210> 13

<211> 19

<212> DNA

<213> Artificial Sequence

<400> 13

gcggatgaag agaggcatg

<210> 14

<211> 18

<212> DNA

<213> Artificial Sequence

<400> 14

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<210> 15

<211> 23

<212> DNA

<213> Artificial Sequence

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tggagacctg ggcaatgtgg ctg

<210> 16

<211> 17

<212> DNA

<213> Artificial Sequence

<400> 16

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<210> 17

<211> 18

<212> DNA

<213> Artificial Sequence

<400> 17

aggcttgtgc cctgcttc

<210> 18

<211> 25

<212> DNA

<213> Artificial Sequence

<400> 18

cagcctgcac tgaggagatc cctca

<210> 19

<211> 28

<212> DNA

<213> Artificial Sequence

<400> 19

aaccgcggtc gtggctcttg cgttctct

<210> 20

<211> 30

<212> DNA

<213> Artificial Sequence

<400> 20

gcgctagctt attgatggac ctctctcaaag

<210> 21

<211> 20

<212> DNA

<213> Artificial Sequence

<400> 21

ttacagattg cgcctgctc

<210> 22

<211> 20

<212> DNA

<213> Artificial Sequence

<400> 22

ccagcagtgg aataaggcct

<210> 23

<211> 25

<212> DNA

<213> Artificial Sequence

<400> 23

aatcacgacc cactgcaagg aacca

<210> 24

<211> 19

<212> DNA

<213> Artificial Sequence

<400> 24

tgcaccacca actgccttag

<210> 25

<211> 19

<212> DNA

<213> Artificial Sequence

<400> 25

ggatgcaggg atgatgttc

<210> 26

<211> 23

<212> DNA

<213> Artificial Sequence

<400> 26

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<210> 27

<211> 877

<212> mRNA

<213> Rattus norvegicus

<400> 27

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<210> 28

<211> 198

<212> PRT

<213> Rattus norvegicus

<400> 28

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20 25 30  
Tyr Arg Gly Lys Tyr Val Val Leu Phe Phe Tyr Pro Leu Asp Phe Thr  
35 40 45  
Phe Val Cys Pro Thr Glu Ile Ile Ala Phe Ser Asp His Ala Glu Asp  
50 55 60  
Phe Arg Lys Leu Gly Cys Glu Val Leu Gly Val Ser Val Asp Ser Gln  
65 70 75 80  
Phe Thr His Leu Ala Trp Ile Asn Thr Pro Arg Lys Glu Gly Gly Leu  
85 90 95  
Gly Pro Leu Asn Ile Pro Leu Leu Ala Asp Val Thr Lys Ser Leu Ser  
100 105 110  
Gln Asn Tyr Gly Val Leu Lys Asn Asp Glu Gly Ile Ala Tyr Arg Gly  
115 120 125  
Leu Phe Ile Ile Asp Ala Lys Gly Val Leu Arg Gln Ile Thr Val Asn  
130 135 140  
Asp Leu Pro Val Gly Arg Ser Val Asp Glu Ala Leu Arg Leu Val Gln  
145 150 155 160  
Ala Phe Gln Tyr Thr Asp Glu His Gly Glu Val Cys Pro Ala Gly Trp  
165 170 175  
Lys Pro Gly Ser Asp Thr Ile Lys Pro Asn Val Asp Asp Ser Lys Glu  
180 185 190

Tyr Phe Ser Lys His Asn

195

<210> 29

<211> 560

<212> mRNA

<213> Homo sapiens

<400> 29

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acattaaaca ctgtaatctt                                     560
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<210> 30

<211> 154

<212> PRT

<213> Homo sapiens

<400> 30

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Gly Ile Ile Asn Phe Glu Gln Lys Glu Ser Asn Gly Pro Val Lys Val
      20              25              30
Trp Gly Ser Ile Lys Gly Leu Thr Glu Gly Leu His Gly Phe His Val
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35	40	45
His Glu Phe Gly Asp Asn Thr Ala Gly Cys Thr Ser Ala Gly Pro His		
50	55	60
Phe Asn Pro Leu Ser Arg Lys His Gly Gly Pro Lys Asp Glu Glu Arg		
65	70	75
His Val Gly Asp Leu Gly Asn Val Thr Ala Asp Lys Asp Gly Val Ala		
85	90	95
Asp Val Ser Ile Glu Asp Ser Val Ile Ser Leu Ser Gly Asp His Cys		
100	105	110
Ile Ile Gly Arg Thr Leu Val Val His Glu Lys Ala Asp Asp Leu Gly		
115	120	125
Lys Gly Gly Asn Glu Glu Ser Thr Lys Thr Gly Asn Ala Gly Ser Arg		
130	135	140
Leu Ala Cys Gly Val Ile Gly Ile Ala Gln		
145	150	